PROCEEDINGS

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XIV

REPORT OF THE PRESIDENT OF THE ACADEMY FOR THE YEAR 1919

BY

C. E. GRUNSKY President of the Academy

The Academy has during the year 1919 continued its activities in research work and on the installation of museum exhibits. The effectiveness of this work is apparent to any one who visits the research departments and the halls, gradually being filled with the habitat groups of mammals and birds and with other exhibits. But when the halls are filled, when the space for habitat groups is exhausted, there is still room for larger service and the Academy stands ready to render the service to the full limit of means placed at its disposal.

Having reached the point where the installations in the Bird and Mammal halls have filled nearly all the large alcoves, it was thought timely by the Council to make some active effort to increase the membership. A committee was named for this purpose, with Mr. M. Hall McAllister as Chairman. The effectiveness of the committee's work is already apparent in the larger membership which can now be reported.

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The membership in the Academy at the close of the year 1918 was 455, and at the close of 1919 it was 550, a gain of 95.

The present membership is made up of :

Patrons												
Honorary Mem	bers .	 			33							
Life Members		 			82							
Fellows		 			20							
Members		 		 4	408							

During the year 1919, 115 new members were admitted and the Academy lost by death 11, and by resignation 5.

Those who were called by death are as follows:

Mr. James V. Coleman	Life	April 13, 1919
Dr. Washington Dodge		
Prof. William G. Farlow	Honorary	June 3, 1919
Mrs. Phœbe A. Hearst	Life	April 13, 1919
Mr. A. Legallet	Member	December 13, 1919
Mr. Jesse W. Lilienthal	Member	June 3, 1919
Mr. James K. Lynch	Member	
Mr. George T. Page	Member	June 30, 1919
Mr. Osgood Putnam	Member	January 23, 1919
Mr. Herman Schussler	Life	April 27, 1919
Mr. Vanderlynn Stow		

The Academy carries on its list of patrons the following names:

Living

Mr.	William B. Bourn
Mr.	William H. Crocker
Mr.	Peter F. Dunne
Mr.	Herbert Fleishhacker
Mr.	Joseph D. Grant
Mrs	. Charlotte Hosmer

Mr. A. Kingsley Macomber Mr. John W. Mailliard Mr. Joseph Mailliard Mr. Alexander F. Morrison Mr. William C. Van Antwerp

Deceased

Mr. William Alvord Mr. Charles Crocker Mr. John W. Hendrie Mr. James Lick Mr. Ignatz Steinhart

The Treasurer's report for the year 1919 shows total receipts, exclusive of the \$250,000 received from the Ignatz Steinhart estate and the \$5000.00 donation by Mr. Van Antwerp hereinafter referred to, of \$71,328.02, of which \$15,-129.32 were paid out as interest. The floating debt of the Academy was practically wiped out. The year's general expenses including the installation of the Fur Seal habitat group and of a number of small bird and mammal groups have been about \$50,000. The net excess of revenues over expenditures was about \$7000. The assets of the Academy as carried in the book accounts, not including the Ignatz Steinhart Trust Fund, were in round numbers \$1,495,000 at the close of the year, but subject to a debt of \$300,000 for which the Market Street property is a pledge.

During the year 1919, ten free lectures have been delivered at the stated meeting of the Academy, as follows:

JANUARY 15.	How Migrating Birds Find Their Way. Mr. Leverett Mills Loomis, San Francisco, California.
March 19.	Pine Insects and their Depredations. Mr. Ralph Hopping, United States Forest Service.
April 16.	Tehachapi as a Faunal Barrier. Prof. John O. Snyder, Department of Zoology, Stan- ford University, and Dr. Roy E. Dickerson, California Academy of Sciences.
May 21.	The Naked Mollusks of Monterey Bay. Dr. F. M. MacFarland, Professor of Histology, Stanford University.
JULY 16.	Fish and Game Legislation of the 1919 Legislature. Mr. Carl Westerfeld, Executive Officer, Fish and Game Commission of California.
August 20.	Notes on the Birds of Lake County, California. Mr. Joseph Mailliard, Honorary Curator, Department of Ornithology, California Academy of Sciences.
September 10.	Egypt, the Land where Ancient and Modern Civilizations Meet. Mr. I. H. Morse, San Francisco, California
October 1.	The Butterfly Map; or The Ground Plan of the World to Scale Mr. B. J. S. Cahill, Oakland, California.
November 5.	The New Theory of the Aether and of the Molecular Forces. Captain Thomas J. J. See, Professor of Mathematics, United States Navy.
December 3.	The Need of more serious Effort to rescue a Fragment of Vanishing Nature. Dr. Francis B. Sumner, Professor of Zoology, University of California.

The Sunday afternoon lectures delivered in the Museum building during 1919 were generally attended by about as large an audience as the limited facilities of the temporary auditorium permit. They include the following :

JANUARY 5. Thirty Thousand Miles in China. Dr. C. K. Edmunds, President of Canton Christian College, Canton, China.

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January 12.	California's Recreation Ground, Her National Forest. R. F. Hammatt, Forest Examiner, United States Forest Service.
February 9.	Trees and Shrubs of the Grand Cañon. Miss Alice Eastwood, Curator, Department of Botany, California Academy of Sciences.
February 16.	The Bacteriology of Peanut Butter. Dr. Ivan C. Hall, Department of Bacteriology, University of California.
February 23.	Birds of Extreme Northern Alaska. Joseph Dixon, Economic Mammalogist, Museum of Vertebrate Zoology, University of California.
March 2.	The Natural History and Control of California Ground Squirrels. Dr. Joseph Grinnell, Director, Museum of Vertebrate Zoology, University of California.
March 9.	Some Philosophical Considerations in Mathematics. Dr. Rufus L. Green, Professor of Mathematics, Stanford University.
March 16.	Inheritance of Mental Ability. Dr. S. J. Holmes, Professor of Zoology, University of California.
MARCH 23.	The Natural History of some Bats. Tracy I. Storer, Field Naturalist, Museum of Verte- brate Zoology, University of California.
March 30.	Mushrooms, Edible and Non-Edible. Prof. James I. W. McMurphy, Department of Botany, Stanford University.
April 13.	Life History and Habits of Some Marine Crustacea. Prof. F. W. Weymouth, Department of Zoology, Stanford University.
April 20.	The Hook-worm Campaign in the Mines of California. Dr. W. W. Cort, Assistant Professor of Zoology, University of California.
April 27.	Military Sanitation. Major W. B. Herms, Associate Professor of Parasitol- ogy, University of California.
May 4.	Birds of the High Sierras and their Environment. Dr. William F. Badè, President, California Associated Societies for Conservation of Wild Life.
Мач 11.	Hunting with a Camera. Paul J. Fair, Department of Exhibits, California Academy of Sciences.
September 14.	Insect Life. Dr. E. C. Van Dyke, Assistant Professor of Ento- mology, University of California.
September 21.	Sanitary Milk Production. Dr. George H. Hart, Associate Professor of Veterinary Science, University of California.
September 28.	Forests and Forestry in California. Dr. W. Metcalf, Assistant Professor of Forestry, University of California.
October 5.	Plant Breeding. Dr. E. B. Babcock, Professor of Genetics, University of California.

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October 12.	The Work of the United States Biological Survey. Dr. W. P. Taylor, Assistant Biologist, United States Biological Survey, Washington, D. C.
October 19.	Pine Insects and their Depredations. Ralph Hopping, National Forest Examiner, United States Forest Service, San Francisco.
October 26.	California's Future; What the Forest Service is doing to determine and meet the coming demands for Timber and other National Forest Resources. C. A. Kupfer, Forest Examiner, United States Forest Service, San Francisco.
November 2.	Some Forestry Problems, both Government and Private. R. F. Hammatt, Forest Examiner, United States Forest Service, San Francisco.
November 9.	Range Management on the National Forests in California. F. D. Douthitt, Grazing Examiner, United States Forest Service, San Francisco.
November 16.	Industrial Research in the Forest Service. Don P. Johnston, Assistant District Forester, United States Forest Service, San Francisco.
NOVEMBER 23.	The Trees and Flowers of the High Sierras. Prof. Howard G. McMinn, Department of Botany, Mills College.
November 30.	How the Map of Europe Has Been Redrawn. Prof. Earle G. Lindsley, Department of Geography and Geology, Mills College.
December 7.	Hook-worm and Human Efficiency. Major Charles A. Kofoid, Professor of Zoology, University of California.
December 14.	A Travalogue on Continental Europe. J. Emmet Hayden, Member San Francisco Board of Supervisors.
December 21.	Construction Activities of the San Francisco Mountain Water Supply. M. M. O'Shaughnessy, City Engineer, San Francisco.
December 28.	A Tramp Around San Francisco in the Early Days. Charles B. Turrill, San Francisco.

The accessions to the Museum and Library were numerous as will be fully set forth in the report of the Director of the Museum. Among them the donation by Dr. G. Dallas Hanna of 8464 specimens of Mollusks from Alaska, about 100,000 specimens of land and fresh water shells from the Mississippi Valley, and 568 bird eggs from the islands of Bering Sea, is worthy of special note.

In continuation of the Fourth Series of the Proceedings, the Academy has published during 1919 the following papers:

Vol. II, Part II, No. 13, pp. 189-258

FIELD NOTES ON THE LAND BIRDS OF THE GALAPAGOS ISLANDS AND OF COCOS ISLAND, COSTA RICA, by Edward Winslow Gifford.

Vol. II, Part II, No. 14, pp. 259-297 THE ANTS OF THE GALAPAGOS ISLANDS, by William Morton Wheeler. Vol. II, Part II, No. 15, pp. 299-308 THE ANTS OF COCOS ISLAND, by William Morton Wheeler. Vol. II, Part II, No. 16, pp. 309-310 A NEW SPECIES OF THE HYMENOPTEROUS GENUS SCLERODERMA FROM THE GALAPAGOS ISLANDS. by Charles T. Brues. Vol. VIII, No. 8, pp. 309-316 REPORT OF THE PRESIDENT OF THE ACADEMY FOR THE YEAR 1918, by C. E. Grunsky. Vol. VIII, No. 9, pp. 317-351 REPORT OF THE DIRECTOR OF THE MUSEUM FOR THE YEAR 1918, by Barton Warren Evermann. Vol. IX, No. 1, pp. 1-36 Notes on West American Chitons—II, by S. Stillman Berry. Vol. IX, No. 2, pp. 37-67 LIFE-ZONE INDICATORS IN CALIFORNIA, by Harvey Monroe Hall and Joseph Grinnell. Vol. IX, No. 3, pp. 69-121 NOTES ON MAMMALS COLLECTED PRINCIPALLY IN WASHINGTON AND CALI-FORNIA BETWEEN THE YEARS 1853 AND 1874 BY DR. JAMES GRAHAM COOPER, by Walter P. Taylor. Vol. IX, No. 4, pp. 123-173 CLIMATIC RELATIONS OF THE TERTIARY AND QUATERNARY FAUNAS OF THE CALIFORNIA REGION, by James Perrin Smith. Vol. IX, No. 5, pp. 175-196 Contribution to the Optics of the Microscope, by C. W. Woodworth. Vol. IX, No. 6, pp. 197-220 The Gopher-Snakes of Western North America, by John Van Denburgh and Joseph R. Slevin. Vol. IX, No. 7, pp. 221-255 NEW OREGON DIPTERA, by F. R. Cole and A. L. Lovett. Vol. IX, No. 8, pp. 257-270 KEY TO THE NORTH AMERICAN SPECIES OF THE DIPTEROUS GENUS MED-ETERUS, WITH DESCRIPTION OF NEW SPECIES, by Millard C. Van Duzee. Vol. IX, No. 9, pp. 271-272 DESCRIPTION OF A NEW FOSSIL FISH FROM JAPAN, by David Starr Jordan. Vol. IX, No. 10, pp. 273-296 NOTES ON THE AVIFAUNA OF THE INNER COAST RANGE OF CALIFORNIA, by Joseph Mailliard. Vol. IX, No. 11, pp. 297-312 NEW SPECIES OF FLIES (DIPTERA) FROM CALIFORNIA, by J. R. Malloch. Vol. IX, No. 12, pp. 313-329 MECHANISM IN THE PRODUCTION OF THE THROAT-FAN IN THE FLORIDA CHAMELEON, by Charles E. Von Geldern.

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In the matter of the bequest to the Academy of a tract of land of 247 acres near Santa Cruz by the late S. F. Thorn, which was referred to in the President's last annual report, it should be noted, that objection was made by some of the heirs to the probating of the will. The superior court allowed the probating of the will and on appeal this action was sustained by the Supreme Court. It appears, therefore, that the Academy will get this property and possibly something more, the Academy having been named residuary legatee in the will. The appraisers of the estate have found property which they valued at about \$29,200 including the land near Santa Cruz which is listed in the appraisal at \$6500.

Near the close of the year 1919 a distribution of the \$250,000 bequeathed by Ignatz Steinhart to the Academy for the erection of an aquarium in Golden Gate Park was ordered by the court, and Dr. Evermann and Civil Engineer Trygve Ronneberg, representing Architect Lewis P. Hobart, as soon thereafter as practical, left for the East to inspect the aquariums of Detroit, Washington, New York, Philadelphia, Boston, and Miami in order that the experiences at these might accrue to our benefit. Of the results of this trip Dr. Evermann will speak in his report as Director of the Museum. It is estimated that about a year and a half will be required to perfect the plans and erect the aquarium building.

It gives me particular pleasure to make a record at this time of the completion of the Olympic or Roosevelt Elk group, which was opened to public view on January 1, 1920. The excellence of the material which was made available for this group and its artistic setting, must, we feel sure, be a source of gratification and pleasure to the generous donor of this group, Mr. William C. Van Antwerp. The Academy, on behalf of the public for whose benefit such installations are made, desires to thank Mr. Van Antwerp for having made this habitat group possible. The grouping and mounting of the animals by Mr. Paul J. Fair conform to the standards already set by the Academy and are receiving much favorable comment; so, too, the high quality of the work of Capt. Charles B. Hudson, who painted the background.

The last of the spaces reserved for seals was filled during the year by the completion of a Fur-Seal group showing a rookery on one of the Pribilof Islands. Here, too, Mr. Fair and Captain Hudson cooperated in the work of the installation. The available material was not entirely satisfactory in quantity or quality. More fur-seal specimens have recently been received, thanks to the courtesy of the U. S. Government, and a re-arrangement and amplification of the foreground may be expected in the near future.

The last alcove in the Mammal Hall is to show, as nearly as may be, what the California grizzly bear looked like. The Academy has already been intrusted with a fund of \$5000 for the installation of such a bear group. The donor is Mr. Ogden Mills to whom also we express our sincere appreciation of his generosity and our gratification in his approval of our efforts to interest and instruct the public in natural science. It will, of course, be impossible to secure the necessary specimens for this group in California, the real California grizzly being extinct; but the nearest related species will be secured and it is expected that within the current year this group, too, may be opened to view.

For one of the small habitat groups, funds to the amount of \$103.00 were provided by Mr. S. Levi, a long-time member of the Academy. His example is worthy of emulation. There are still quite a number of small mammal and bird groups to be installed. There is opportunity also for some one to provide means for the preparation of the portable habitat groups which would prove exceptionally valuable for use in schools. And, while I am speaking of the needs of the Academy, may I not again call attention to the need of an addition to the museum building? There should be another unit equal to, or larger than, the present one at once made available, but this can only be done with the help of one or more public spirited citizens. And, if the plans for a close connection of the Steinhart aquarium with our museum building be carried out, then, too, further provision should be made for suitable architectural ornamentation of the main entrance to the resulting central court. I allude to these matters in order that the willingness of the Academy to enlarge its service to any extent for which means are provided may be generally understood.

In the President's last annual report it was stated that ownership of the John W. Mailliard and Joseph Mailliard collection of eggs and bird skins was to be transferred by them to the Academy. This is now an accomplished fact and the collection has been made the property of the Academy. I repeat the Academy's thanks for this exceptionally valuable addition to its research material. The attractions of the Academy and the opportunity which it affords for study have proved so alluring to Mr. Joseph Mailliard that it has been possible to induce him to take the honorary curatorship of the Academy's department of Ornithology.

Dr. Roy E. Dickerson has been compelled by important demands on his time to sever his active connection with the department of Invertebrate Paleontology, but has been retained as honorary curator and Dr. G. Dallas Hanna was made curator and has been active in that capacity during the last months of the year.

The activities of the several departments in which the scientific work of the Academy received attention, are fully set forth in the report of the Director of the Museum, Dr. Barton Warren Evermann, and in the reports of the curators. It will be noted from these reports that much valuable work has been done and that the studies afield have extended in some cases beyond the limits of the state.

May I not suggest in closing, that the members of the Academy have a right to feel that this institution is their institution which they control through their officers and that a proper sense of proprietorship should prompt an endeavor, as opportunity offers, to enlist further financial support. The Academy should be in position to assemble and house the wealth of material afforded by nature in and about the shores of the Pacific Ocean which is worthy of collection in such a museum, as has already been well started but which remains capable of great expansion.

Again I must thank the staff and employees of the Academy for another year of faithful service.